Instructor's Summary for
Murach's SQL Server 2022 for Developers

The instructor's materials for *Murach's SQL Server 2022 for Developers* will help you run an effective course based on the book. We recommend that you begin by reading the topics under *What's included in the instructor's materials* because they not only describe the instructor resources but also our underlying instructional philosophy. Then, the section entitled *How to get started with our materials* provides installation details and gives you tables that summarize the components at a glance.

In addition to the main instructor's materials, we provide a downloadable Canvas course file that you can import into the Canvas LMS. This course file includes most of the materials described in this document after they have been imported into Canvas and organized into modules. So, if you use Canvas, this file makes it easy to start a new course based on our book. Like the instructor's materials themselves, you can download the Canvas course file from our instructor's website.

What's included in the student download

To help your students get the most from our book, our retail website (www.murach.com) lets them download (1) scripts that create the three databases that are used throughout the book, (2) scripts that contain the SQL statements for the book examples, and (3) solutions to the exercises that are at the end of each chapter in the book. Appendix A in the book shows your students how to download and install these files on their own systems.

The scripts that create the databases

Before your students begin working with this book, they should run the scripts that create the following databases:

Database	Description
AP	The Accounts Payable (AP) database that's used for most of the examples.
ProductOrders	A database that's used by a few examples.
Examples	A database that contains many small tables that are used by some examples.

The scripts for the book examples

Once your students have run the SQL scripts that create the databases, they can start experimenting with the SQL scripts for the book examples to see how they work. They can run them as-is to get the results shown in the book, and they can start experimenting with the code to see how various changes affect the results. What's more, they can copy and paste code from these scripts as a starting point for their own SQL script files.

The solutions to the exercises

To help students get over any learning obstacles when they're working on their own, the student download also provides the solutions to the chapter exercises in the book. That way, the students can check the solutions to see how something is done whenever they get stuck on an exercise. We think that providing the solutions is the right approach because it makes these exercises optimal for self-study and helps students learn faster and better.

However, we realize that you may not always want your students to have solutions to exercises you give them. That's why the instructor's materials include two additional sets of exercises. You can assign these exercises to challenge and test your students. We only provide solutions to these exercises in the instructor's materials. As a result, you can choose whether and when to make them available.

What's included in the instructor's materials

Besides the materials in the student download, the instructor's materials include objectives, test banks, two additional sets of exercises, and PowerPoint slides.

The student download

These are the same materials that your students can download from our website: the scripts that create the databases, the scripts for the book examples, and the scripts for the exercise solutions. We've included them in the instructor's materials for convenience so you can easily demonstrate and review the book examples and exercise solutions in class without having to download them separately yourself.

Objectives

We believe that instructional objectives should be the start of any educational methodology, so we provide a set of objectives for each chapter in the book. We prepared these based on the principles presented by Robert F. Mager in his classic book, *Preparing Instructional Objectives*. As a result, our objectives describe the skills that your students or trainees should have when they complete a chapter, and you should be able to test whether they have those skills.

If you review the objectives, you'll see that the first objectives for most chapters are what we refer to as *applied objectives*. These ask the students to apply what they've learned. These of course are the critical objectives of a programming course, and they are best tested by having the students or trainees do exercises like the ones that we provide.

After the applied objectives for each chapter, you'll find what we refer to as *knowledge objectives*. These objectives define skills like identifying, describing, and explaining the required concepts, terms, and procedures. These objectives determine whether your students are able to talk intelligently about the topics that are presented, and they can be tested by the questions in our test banks.

To help you get the most from the instructional objectives, we have included them at the start of the PowerPoint slides for each chapter. As we see it, presenting the objectives at the beginning of a chapter makes students' study more focused and efficient.

Test banks

To test comprehension, the instructor's materials include one test bank for each chapter in the book. We provide these test banks in multiple formats, and they can be imported into in most learning management systems like Blackboard and Canvas.

Each test bank provides multiple-choice questions that are designed to test the skills described by the objectives for that chapter. Each test question is designed to test a skill described by a single objective. This keeps the promise to the students that they will only be expected to have the skills that are described by the objectives.

In addition, we don't include questions that test trivial details that programmers in the "real world" would look up rather than memorize. Instead, we focus on questions that test the concepts and skills that are required on the job.

Two additional sets of exercises

Because we provide the solutions for the book exercises in the student download, the instructor's materials include two additional sets of exercises and their solutions. These

work like the book exercises, but they use a different database. One set of exercises uses an online music store called My Guitar Shop, and the other uses a database for a college called Murach College. (We thank Jim Rhodes, a Computer Science professor at Florida State College at Jacksonville, for his contributions that provided the basis for the Murach College exercise set.)

These exercises are provided in Word documents so you can modify them if you want, as well as PDF documents that you can distribute to your students if you don't want to make any changes. Some additional files that your students will need for these exercises are also in the instructor's materials so you can distribute them. Last, the solutions are provided so you can demonstrate and review them in class. However, these solutions aren't available to your students unless you decide to make them available.

Because the book exercises are so easy to use, we suggest that you start by assigning them to your students for practice. That will give them a chance to try out what they've been learning and build their confidence. Then, you can use either the My Guitar Shop or Murach College exercises (or both) to reinforce or test their skills.

PowerPoint slides

The PowerPoint slides present all of the critical information from the figures in the book. That includes the diagrams, screenshots, tables, syntax, and code. As a result, these slides make it easy to review any of the skills that your students have difficulty with. In addition, the slides for each chapter start with the instructional objectives so you can review them in class. These slides can be used as they are or modified to suit your teaching style.

How to get started with our materials

You can request the instructor's materials for our book at our instructor website (www.murachforinstructors.com) and download them from your instructor's account. The download is a zip file. Then, you can extract the materials on your computer as described below.

Once the installation is done, you can do a thorough review of all of the materials. In particular, we suggest running some of the book examples and exercise solutions to see the level of competence that our book develops. You'll also want to click through some of the PowerPoint slides to see how they can help you review and reinforce the information that's presented in the book.

How to use the zip file

1. Download the zip file of instructor's materials from your Murach instructor's account page.

2. If you haven't already done so, create a Murach folder on your C drive.

3. Unzip the zip file into the Murach folder. This will create a file structure that starts with:

   C:\Murach\SQL Server 2022

To help you find what you're looking for, the entire file structure for the instructor's materials is shown on the next page.

The student download directories that are installed

C:\Murach\SQL Server 2022\ Student download\...	Contents
Databases	The script files for creating and restoring the three databases (AP, ProductOrders, and Examples) required by the book examples and exercises.
Exercises	The solutions for the book exercises, organized by chapter.
Scripts	The script files for the SQL statements presented throughout the book.

The instructor's materials that are installed

C:\Murach\SQL Server 2022\ Instructors\…	Contents
Instructor's summary.pdf	This document.
Objectives.docx Objectives.pdf	The instructional objectives for all chapters, in both Word and PDF formats. These objectives are also at the start of the PowerPoint slides for each chapter.
My Guitar Shop exercises\	
My Guitar Shop exercises.docx My Guitar Shop exercises.pdf	The My Guitar Shop exercises, in both Word and PDF formats.
MGS Exercise starts	A directory that includes: (1) the script file for creating the My Guitar Shop database; (2) starting script files for some of the My Guitar Shop exercises.
MGS Exercise solutions	A directory with the solutions for the My Guitar Shop exercises, organized by chapter.
Murach College exercises\	
Murach College exercises.docx Murach College exercises.pdf	The Murach College exercises, in both Word and PDF formats.
MC Exercise starts	A directory that includes: (1) the script file for creating the College database; (2) starting script files for some of the College exercises.
MC Exercise solutions	A directory with the solutions for the College exercises, organized by chapter.
Slides	One set of PowerPoint slides for each chapter.
Test banks	One test bank of multiple-choice questions per chapter, organized by format.

Any comments?

If you have any comments or suggestions for us on *Murach's SQL Server 2022 for Developers* or any of its student or instructor's materials, we would appreciate hearing from you. We'll also be glad to answer any questions that you have. And if you want to let us know that you're going to adopt our book for your course, that would make our day. Just email us at the addresses below. But whether or not we hear from you, we thank you for your interest in our SQL Server 2022 book.

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